# Policy and Research Needs Statement for the Resources Agency Sea Grant Advisory Panel

# August 15, 1994

## Introduction

Under the provisions of Section 6217 of the Public Resources Code, the Resources Agency Sea Grant Advisory Panel (RASGAP) is charged with the responsibility to:

- identify State needs which might be met through Sea Grant research projects, including but not limited to such fields as living marine and estuarine resources, aquaculture, ocean engineering, marine minerals, public recreation, coastal physical processes and coastal and ocean resources planning and management, and ocean data acquisition and dissemination;
- establish priorities concerning research needs; and
- submit research needs and priorities to the Legislature each year.

The RASGAP consists of representatives from the:

California Resources Agency
California Department of Boating and Waterways
California Department of Conservation
California Department of Fish and Game
Office of Oil Spill Prevention and Response
California Department of Health Services
State Water Resources Control Board
State Lands CommissionOcean Engineering Industry
California Coastal Commission

California State Senate
California State Assembly
University of California
University of Southern California
California State University
Fish Industry
Aquaculture Industry

# I. Goals and Objectives

A. The primary goal of the California Sea Grant Program is to encourage and support scientifically sound research that is of clear benefit to the people of the State of California and that addresses key coastal and/or ocean resource management, policy, science, and engineering issues that face the State of California now or in the reasonably foreseeable future (PRC Section 6217(d)(7)).

- B. The Resources Agency Sea Grant Advisory Panel (RASGAP) strongly encourages proposals that address the primary goal. RASGAP will pursue a systematic decision-making process to determine which proposals will be awarded State Sea Grant funds.
- C. The RASGAP will evaluate all project proposals to determine whether they meet the following objectives:
  - The proposed project or activity must address or substantially contribute to the understanding
    of management problems or opportunities relating to the use, conservation, or restoration of
    coastaland/or ocean resources.
  - The proposed project or activity must provide a clear research objective, demonstrate the use of sound scientific methods and experimental design, and specify the anticipated product.
  - The proposed project or activity must demonstrate how it can assist, complement, or augment the work of government agencies or private sector interests in their efforts to manage the use, conservation, or restoration of coastal and/or ocean resources.
  - The proposed project or activity must be supported by, prepared in cooperation with, or of expressed interest to a public or private agency or association involved with the use, conservation, or restoration of coastal and/or ocean resources.
  - The proposed project or activity must promote or be of discernible benefit to current or future generations.

#### II. Policies and Recommended Marine Research Areas

The following categories include topics of special concern and are most deserving of attention. The list of examples within each category is not exhaustive, but submitted projects should be related to categories provided.

## A. Coastal and Ocean Ecosystems and Processes

**Policy**: The RASGAP shall encourage and support research and programs that will provide information for use by the legislature, government agencies, the public, and the private sector regarding the use, conservation, or restoration of coastal and/or ocean resources consistent with California's Coastal Zone Management Program.

## **General Research Areas**

## Coastal & Ocean Habitats

- Identify the important functions and processes of environmentally sensitive coastal and/or
  ocean habitat areas, including wetlands, riparian corridors, estuaries, intertidal and sub-tidal
  habitat, and sand dunes.
- Identify and evaluate strategies and techniques to improve the protection, enhancement, monitoring, and restoration of environmentally sensitive coastal and/or ocean habitat areas.
- Identify and evaluate environmentally sound mitigation strategies and techniques to avoid, lessen, or compensate for the adverse impacts of development on coastal and/or ocean resources.

- Improve the understanding of marine-related ecosystems, such as coastal watersheds, and develop strategies and techniques to improve the management of these systems.
- Evaluate methods to better understand, measure, and reduce point and non-point source water pollution.
- Evaluate the evolving legal doctrine relative to the protection of the public interest, private property rights, international law, and public trust values in living and non living coastal and/or ocean resources. Identify and evaluate legal strategies or dispute resolution processes to address these evolving legal trends.

## **Cumulative Impact Assessment**

• Identify and evaluate planning strategies and management techniques to address the cumulative impacts of coastal and ocean uses. Such assessments should include an analysis of the impacts of existing, approved, proposed, or projected developments or uses.

## **Coastal Processes**

• Evaluate methods to better understand, predict, plan for, or respond to the hydrodynamic, sedimentation, and geotechnical processes that affect the survival of coastal and/or ocean structures or that cause shorelines to change.

## B. Economically Important Coastal and Ocean Commercial Uses

**Policy**: The RASGAP shall encourage and support research and programs that promote the understanding and development of environmentally sustainable uses of coastal and/or ocean resources that are important to California's economic well-being.

# **General Research Areas**

#### Tourism & Recreation

• Identify and evaluate environmentally acceptable methods to meet the demand for coastal and/or ocean related tourism and recreational uses, especially in view of California's rapidly increasing population and its developing ethnic, cultural, and economic diversity.

### Living Marine and Estuarine Resources

Conduct studies to increase the understanding of living marine and estuarine resources, such as
the assessment of fish populations; develop techniques and strategies to improve the viability
of recreational and commercial fisheries, aquaculture and other types of coastal and/or ocean
dependent uses concerning living marine and estuarine resources. This could include
developing multi-species, multi-stock, bio-economic models and other assessment techniques.

#### Coastal-Dependent Industry

Identify and evaluate strategies and techniques to enhance and promote the environmental sustainability of coastal and/or ocean dependent industries such as commercial ports and harbors, commercial fishing and processing, aquaculture, marine transportation, ocean engineering, tourism, recreation, as well as energy and mineral extraction activities.

#### Marine Biotechnology

• Develop and advance the tools of marine biotechnology and molecular and cellular biology for

applications in pharmacology and biomedical research, aquaculture, environmental remediation, sea food safety, and other related fields.

## Ocean Engineering

- Develop and evaluate ocean engineering methods, systems, or technologies with a focus on practical and economically viable applications to coastal and/or ocean uses.
- Identify economically viable and commercially useful alternative coastal and/or ocean applications of military engineering concepts, technologies, or products.

### C. Public and Environmental Health, Safety, and Welfare

**Policy**: The RASGAP shall encourage and support research and programs that help safeguard the public's health, safety and welfare relative to coastal and/or ocean uses and that protect or restore the quality of coastal and/or ocean waters which sustain the State's living marine resources.

#### **General Research Areas**

#### Fish Processing

 Identify and evaluate methods and technologies to assist primary receivers, processors, wholesalers, and distributors of fish products in their compliance with safe handling requirements, such as the new FDA Hazard Analysis Critical Control Point (HACCP) mandates.

## **Natural Resource Economics**

- Analyze methods to improve the assessment of economic damage caused by accidents such as oil or hazardous material spills.
- Identify and evaluate the socio-economic, environmental, and human health consequences of natural toxins and waste disposal or discharge into the marine environment.

### D. Public Education, Data Collection and Information Technology

**Policy**: The RASGAP shall encourage and support research and programs that contribute to the public's understanding of coastal and/or ocean ecosystems.

## **General Research Areas**

# Education

• Develop or improve curricula and study aids (such as public education pamphlets and brochures) that promote public understanding of coastal and/or ocean resources.

### Information Transfer

 Identify and evaluate methods to improve information transfer technology such as computer based information systems that facilitate communication, analysis, and improved understanding of coastal and/or ocean resources.

#### Scientific Advisory

• Identify and support methods to improve the delivery and content of scientific advisory services, such as the services provide by the Sea Grant Advisor program.